



1797.0090005/RWE/KKV

## POWER OF ATTORNEY FROM ASSIGNEE

RECEIVED APR 24 2000

The University of Sheffield, a university of United Kingdom, having a principal place of business at Western Bank, Sheffield, United Kingdom S10 2TN, is assignee of the entire right, title and interest for the United States of America (as defined in 35 U.S.C. § 100), by reason of an Assignment to the Assignee executed on \_\_\_\_\_ of an invention known as Recovering Metals from Soil (Attorney Docket No. 1797.00900005), which is disclosed and claimed in a patent application of the same title by the inventor(s) Rufus L. CHANEY, J. Scott ANGLE, Yin-Ming LI, Alan J.M. BAKER (said application filed on November 10, 1999 at the U.S. Patent and Trademark Office, having Application Number 09/437,607).

The Assignee hereby appoints the following U.S. attorneys to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith: Robert Greene Sterne, Registration No. 28,912; Edward J. Kessler, Registration No. 25,688; Jorge A. Goldstein, Registration No. 29,021; Samuel L. Fox, Registration No. 30,353; David K.S. Cornwell, Registration No. 31,944; Robert W. Esmond, Registration No. 32,893; Tracy-Gene G. Durkin, Registration No. 32,831; Michele A. Cimbala, Registration No. 33,851; Michael B. Ray, Registration No. 33,997; Robert E. Sokohl, Registration No. 36,013; Eric K. Steffe, Registration No. 36,688; Michael Q. Lee, Registration No. 35,239; and Steven R. Ludwig, Registration No. 36,203. The Assignee hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send correspondence to:

Sterne, Kessler, Goldstein & Fox P.L.L.C.  
1100 New York Avenue, N.W.  
Suite 600  
Washington, D.C. 20005-3934  
U.S.A.

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Direct phone calls to 202-371-2600.

FOR: The University of Sheffield

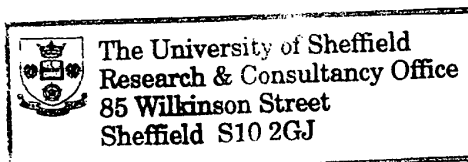
SIGNATURE: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

*Rufus L. Chaney*  
*J. Scott Angle*  
**Intellectual Property and  
Technology Transfer Manager**

*20 April 2000*



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1797.0090005/RWE/KKV

## POWER OF ATTORNEY FROM ASSIGNEE

The United States of America as Represented by the Secretary of Agriculture, a United States Government Agency, having a principal place of business at 5601 Sunnyside Avenue, Room 4-1159, Beltsville, Maryland 20705-5131, is assignee of the entire right, title and interest for the United States of America (as defined in 35 U.S.C. § 100), by reason of an Assignment to the Assignee executed on \_\_\_\_\_ of an invention known as Recovering Metals from Soil (Attorney Docket No. 1797.00900005), which is disclosed and claimed in a patent application of the same title by the inventor(s) Rufus L. CHANEY, J. Scott ANGLE, Yin-Ming LI, Alan J.M. BAKER (said application filed on November 10, 1999 at the U.S. Patent and Trademark Office, having Application Number 09/437,607).

The Assignee hereby appoints the following U.S. attorneys to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith: Robert Greene Sterne, Registration No. 28,912; Edward J. Kessler, Registration No. 25,688; Jorge A. Goldstein, Registration No. 29,021; Samuel L. Fox, Registration No. 30,353; David K.S. Cornwell, Registration No. 31,944; Robert W. Esmond, Registration No. 32,893; Tracy-Gene G. Durkin, Registration No. 32,831; Michele A. Cimbala, Registration No. 33,851; Michael B. Ray, Registration No. 33,997; Robert E. Sokohl, Registration No. 36,013; Eric K. Steffe, Registration No. 36,688; Michael Q. Lee, Registration No. 35,239; and Steven R. Ludwig, Registration No. 36,203. The Assignee hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send correspondence to:

Sterne, Kessler, Goldstein & Fox P.L.L.C.  
1100 New York Avenue, N.W.  
Suite 600  
Washington, D.C. 20005-3934  
U.S.A.

Direct phone calls to 202-371-2600.

FOR: The United States of America as Represented by the Secretary of Agriculture

SIGNATURE: \_\_\_\_\_

*Janelle S. Bente*

BY: \_\_\_\_\_

TITLE: Patent Advisor

DATE: April 13, 2000



## Certificate Under 37 C.F.R. § 3.73(b)

Applicant/Patent Owner: Rufus L. Chaney, J. Scott Angle, Yin-Ming Li, Alan J.M. Baker

Application No./Patent No. 09/437,607 Filed/Issue Date: November 10, 1999

Entitled: Recovering Metals from Soil

University of Maryland, a University  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☐ the assignee of the entire right, title, and interest, or

2. ☒ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

A. ☒ An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
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3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: April 10, 2000

Name: James A. Poulos, IV

Title: Acting Executive Director

Signature: James A. Poulos

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## INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

THIS AGREEMENT by and between J. Scott Angle, an individual having a principal residence at 10241 Bristol Channel, Ellicott City, MD 21042 (hereinafter referred to as "Assignor"), and the University of Maryland, having a principal office at Office of Technology Liaison, College Park, Maryland 20742 (hereinafter referred to as "Assignee").

### WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. LS-98-069 and LS-98-079 and in U.S. Patent Application No. 09/437,607 titled "Recovering Metals from Soil" filed November 10, 1999 (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the University of Maryland Patent Policy and Copyright Policy, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

### **Section 1. Assignment of the Works.**

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

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**Section 2. University of Maryland Copyright and Patent Policies.**

The assignment of rights perfected hereunder shall be governed by the University of Maryland Patent Policy and Copyright Policy as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

**Section 3. Warranty.**

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

**Section 4. Jurisdiction.**

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

**ASSIGNOR**

Agreed to by: J. Scott Angle  
Printed Name: J. Scott Angle

Date: Jan 28, 2000

**ASSIGNEE (The University of Maryland)**

Acknowledged and Agreed to by: James A. Poulos, III  
Title: Acting Executive Director

Date: Feb 8, 2000

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## Certificate Under 37 C.F.R. § 3.73(b)

Applicant/Patent Owner: Rufus L. Chaney, J. Scott Angle, Yin-Ming Li, Alan J.M. Baker

Application No./Patent No. 09/437,607 Filed/Issue Date: November 10, 1999

Entitled: Recovering Metals from Soil

The United States of America as Represented by the Secretary of Agriculture, a  
United States Government Agency  
(Name of Assignee)

states that it is:

1. ☐ the assignee of the entire right, title, and interest, or
2. ☒ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

A. ☒ An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

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The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: April 13, 2000

Name: Janelle S. Graeter

Title: Patent Advisor

Signature: Janelle S. Graeter

WHEREAS, I (we), Rufus L. Chaney and Yin-Ming Li  
Residing at 10910 Dresden Drive, Beltsville, MD 20705 and 12019 Coldstream  
Drive, Potomac, MD 20854; Respectively

having jointly invented an improvement in Recovering Metals from Soil

for which I (we) have made application for Letters Patent of the United States, and further identified as Serial Number 09/437,607 filed on November 10, 1999 Department of Agriculture Docket No. 0076.99 and

WHEREAS, the United States patent rights in said invention are assignable to the United States by virtue of my (our) having made the invention while in the employ of the United States Department of Agriculture under applicable law and regulations of the United States Department of Agriculture which render the patent rights so assignable; and

WHEREAS, the United States, as represented by the Secretary of Agriculture, is desirous of acquiring an assignment of said patent rights;

NOW, THEREFORE, in consideration of these premises, I (we) hereby assign said patent rights to the United States of America, as represented by the Secretary of Agriculture;

I (we) further grant to the Government of the United States a nonexclusive, irrevocable, royalty-free license in any patent which may issue on said invention in any foreign country, including the power to issue sublicenses for use in behalf of the Government and/or in furtherance of the foreign policies of the Government.

Still further, I (we) shall not employ such foreign patents to bar the sale or use, in any foreign country, of materials which are manufactured or otherwise produced essentially in the United States. Rather, I (we) shall grant patent licenses therein, at reasonable terms, to permit such sale or use; Provided, that I (we) shall not be compelled to grant such licenses in any foreign country where said materials are staple articles or commodities of commerce suitable for substantial use other than in infringement of such patents.

Rufus L. Chaney  
Rufus L. Chaney

Jan. 31, 2000  
(Date)

Yin-Ming Li  
Yin-Ming Li

2/1/2000  
(Date)

It is requested that the Commissioner of Patents and Trademarks record this agreement and return the recorded assignment to:

Janelle S. Graeter  
Registration Number 35,024  
USDA-ARS-OTT  
5601 Sunnyside Avenue, Rm. 4-1159  
Beltsville, Maryland 20705-5131

DO NOT FORWARD  
ASSIGNMENT BRANCH  
OR RECORDATION

## Certificate Under 37 C.F.R. § 3.73(b)

Applicant/Patent Owner: Rufus L. Chaney, J. Scott Angle, Yin-Ming Li, Alan J.M. Baker

Application No./Patent No. 09/437,607 Filed/Issue Date: November 10, 1999

Entitled: Recovering Metals from Soil

The University of Sheffield

(Name of Assignee)

, a University

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☐ the assignee of the entire right, title, and interest, or
2. ☒ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

A. ☒ An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

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The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: 20 April 2000

Name: Dr. R.A. Exley

Title: Intellectual Property and Technology Transfer Manager

Signature: [Signature]





## INVENTORS ASSIGNMENT AGREEMENT

DO NOT FORWARD  
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THIS AGREEMENT is made the 3rd day of February Two thousand  
BETWEEN Alan J M Baker (hereinafter the Inventor) of one part and THE  
UNIVERSITY OF SHEFFIELD of Western Bank Sheffield S10 2TN (hereinafter  
called "the University") of the other part.

### WHEREAS: -

A The Inventor has made an Invention (hereinafter called "the Invention" in collaboration with the employees of the University of Maryland and the US Department of Agriculture, short particulars of which are set out in the Schedule hereto and recognises that in consequence of his status as an employee of the University that his rights in the Invention belong to the University with the right to apply for patent or similar protection in respect thereof.

B The Inventor and the University wish to set out their financial obligations in respect of the exploitation of the Invention.

### NOW THIS AGREEMENT WITNESSETH as follows: -

- 1 THE Inventor warrants to the University that he is a true Inventor of the said Invention.
- 2 THE Inventor: -  
undertakes to execute at the direction and expense of the University such documents as the University shall require in connection with any application for any patent registered design or similar protection in any part of the world in respect of the said Invention and to confirm the absolute legal and beneficial ownership of the University in the Invention and all intellectual property rights relating thereto and
- 3 THE Inventor undertakes not to disclose or to assist others to disclose any information concerning the said Invention other than as may be permitted in writing by the University.
- 4 IN consideration of the undertaking made by the Inventor in this Agreement the University hereby agrees to:
  - a) pay 50% of its Net Income to the Inventor to be allocated as follows:

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- b) pay 20% of Net Income to the Inventors' Department.

The remaining 30% of Net Income will be paid to the Central Funds of the University.

- c) It is agreed by the Inventor that he will diligently provide support for this opportunity and its exploitation.

- 5 FOR the avoidance of doubt Net Income shall mean the net proceeds of any sale or exploitation of the Invention by the University after deduction of costs incurred by the University in protection, exploitation, development, sales and policing of the Invention, including but not limited to patent expenses, legal fees, taxes and sums expended in development of the Invention to the extent that these are not recoverable from a third party.
- 6 THE University has the right at its own expense to apply for patent design or similar protection in any part of the world whether in the Inventors' name or otherwise.
- 7 THE Inventor make(s) no warranty as to whether or not the Invention infringes any intellectual property rights of Third Parties.
- 8 NOTHING in this Agreement shall constitute the University an agent of the Inventor and the University shall be at liberty to exploit the Invention or not as it shall determine in its absolute discretion.

AS WITNESS the hands of the Inventor and the hand of Dr R A Exley for and on behalf of the University the day and year first above written.

Signed by the said R A Exley R A EXLEY Date: 7/2/2000  
on behalf of the University of Sheffield

in the presence of CLA WITNESS  
Jennifer HUNTER

Signed by the said Alan J M Baker Date: Alan J M Baker 3.2.00.

in the presence of Alan J M Baker WITNESS

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**Details of Invention**

Title

Recovering Metals from Soil

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University Reference DIS 20005

United States Application No: 09/437,607, filed 10 November 1999

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